# **REMARKS/ARGUMENTS**

In view of the amendments and remarks herein, favorable reconsideration and allowance of this application are respectfully requested. By this amendment, claims 1, 7, and 12 have been amended. Thus, claims 1-16 are pending for further examination.

## Rejection under 35 USC 101

Claims 1-16 have been rejected under 35 USC 101 as allegedly being directed to non-statutory subject matter. Applicants note that the rejection in the Office Action appears to be incomplete, as the form paragraph is not accompanied by any specific reasoning for this new rejection of claims 1-16. In any event, claims 1-16 clearly are directed to statutory subject matter, as they all lead to useful, concrete, and tangible results. For example, claim 1 relates to a method of animating a user-controlled character in a virtual three-dimensional environment of a dynamic three-dimensional game space. which produces a useful, tangible, and concrete result. Claim 7 similarly relates to a method for controlling the animation of a user-controlled character in a virtual threedimensional world of a dynamic three-dimensional game space, which produces a useful, tangible, and concrete result. And claim 12 relates to a method for animating an object in a virtual three-dimensional world of a dynamic three-dimensional game space, which produces a useful, tangible, and concrete result. The dependent claims inherit at least this utility. Thus, for at least the foregoing reasons, withdrawal of this rejection is respectfully requested.

## Rejection Under 35 USC 112, First Paragraph

Claims 1-16 have been rejected under 35 USC 112, first paragraph, as allegedly failing to comply with the written description requirement. Without acquiescing to the propriety of the rejection, Applicant has amended independent claims 1, 7, and 12. In particular, claims 1, 7, and 12 now indicate that "the tag is at least initially not apparent." Support for this limitation is found, for example, both in the figures and in the specification. For example, in each of Figures 1-5a, the reference "T" points to the tagged object, not to a tag that is apparent to the user. Similarly, in each of Figures 6-9, the references "T1" and "T2" each point to the respective tagged objects, not to any tags that are apparent to the user. As a final example, the illustrative line of vision in Figure 5a clearly points to the tagged object, not to an initially apparent tag.

The specification reiterates this point. For example, "the animation engine animates the character to pay attention to the tagged object (e.g., by animating the character to look or stare at the tagged object so long as the character remains close to the tagged object)" (page 4, lines 6-8). As another example, "the character 10 continues to face and pay attention to the tagged object 10 while it remains in proximity to the tagged object" (page 9, lines 9-11). The example given with respect to Figures 1-5a makes clear that the tagged object is visible, whereas the tag is at least initially not apparent to the user:

"When the character first enters the corridor, as shown in Fig. 1, the character is animated using an existing or generic animation that simply shows the character walking. However, when the tag becomes active, i.e., the character approaches the painting 12, the reactive animation engine of

the instant invention adapts or modifies the animation so that <u>the character</u> pays attention to the painting in a natural manner" (page 9, lines 16-20).

As a final example, the specification at page 10, line 23 to page 11, line 1 specifies that "to tag a particular object 12, one specifies the location of a 'tag point' or 'tag surface' in 3D space to coincide with the position of a desired object in 3D space." That is, one does not specify the location of any tag that is at least initially apparent to a user.

For at least these reasons, Applicants submit that the specification would have reasonably conveyed to one of ordinary skill in the art at the time of the invention that the inventors were in possession of the claimed invention. Thus, withdrawal of this rejection is respectfully requested.

#### Rejection under 35 USC 103

Claims 1-16 remain rejected under 35 USC 103 as allegedly being obvious over Ventrella in view of Bickmore. Without acquiescing to the propriety of the arguments in the Office Action, and without acquiescing to the propriety of the rejections under 35 USC 103, Applicant has amended claims 1, 7, and 12 to more patentably distinguish the invention defined by the claims from the prior art of record. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

<u>Each and Every Limitation of Claim 1 Is Not Taught or Suggested by the Alleged</u> Combination of Ventrella and Bickmore.

For a claim to be properly rejected under 35 USC 103, each and every limitation of that claim must be taught or suggested in a combination of references. Ventrella and

Bickmore, alone and in combination, do not disclose all of the limitations of claim 1. For example, Ventrella and Bickmore, alone and in combination, fail to teach or suggest "using the location of the tag and the tag information to dynamically modify the user-controlled character's animation and the animation of the object in the three-dimensional virtual environment associated with the tag in real time."

Assuming, arguendo, that Ventrella teaches using a tag to animate an avatar (an alleged "teaching" still challenged by Applicants), Ventrella does not teach using the same tag to animate the object associated with the tag. For example, according to Ventrella, an avatar might stare at a bird or turn its head to follow the flight of the bird. Assuming that the bird is a tagged object, Ventrella simply does not teach or suggest doing anything to the bird itself.

To the contrary, as the example provided with reference to Figures 6-9 of the present application illustrates, both the user-controlled character and an object associated with a tag is modified in response to tag information embedded therein.

Bickmore was introduced to teach embedding tag information into a tag.

However, Bickmore fails to make up for the deficiency noted with respect to Ventrella.

Specifically, Bickmore only discloses having an avatar provide information related to the document when the avatar is dragged over the tagged object (e.g. text, an image, etc.). In no way does Bickmore teach or suggest modifying the tagged object. To the contrary, Bickmore teaches avatar-mediated navigation through a document or series of documents. The notion of changing the text, image, or other tagged object of a document

based on information stored in that tag is foreign to Bickmore. Indeed, the Avatar Scripting Language disclosed in Bickmore relates merely to methods of changing the avatar, not any part of the document itself.

The Office Action now alleges that:

"It is implicitly taught that selecting a hypertext link for navigation, as taught by Bickmore et al., would result in the display (animation) of new information, tied to said hypertext link, within an area of said hypertext link (i.e. the display of a new page of information overlaid on a previous page after said hypertext link is selected)" (page 5, last paragraph to top of page 6).

Applicants agree that selecting a hypertext link for navigation would result in the display of a new page of text overlaid on the previous page of text. But Applicants do not agree that overlaying a new static webpage on top of an old static webpage would result in any kind of animation. Replacing a single, static webpage with another single, static webpage is not animation. By extension, then, the alleged combination cannot result in animation of both the user-controlled character and the tagged object as required by the claims. This difference further emphasizes Applicants' contention, repeated below, that the combination of Ventrella and Bickmore is inappropriate. Because the alleged Thinkillar and White and Bickmore with the web thinkillar and the web the invention and even if Ventrella and Bickmore were forcibly combined in the manner alleged in the Office Action, one of ordinary skill in the art still would not achieve the invention defined by claim 1. In particular, given the purported teachings of the alleged combination, a user-controlled character coming into proximity to a tagged object would

cause an animation of the user-controlled character and an animation of the underlying virtual environment, not an animation of the tagged object. In marked contrast, claim 1 requires animating the user-controlled character and the tagged object in the virtual environment when the user-controlled character comes into proximity to the tagged object.

Thus, the alleged combination not only would not result in the claimed invention, but the alleged combination also would change the underlying principle of operation of the claimed invention and the base reference (i.e. Ventrella), at least insofar as it would result in a change to the virtual world, not to a change of a tagged object in the virtual world. As such, even if the combination of Ventrella and Bickmore were appropriate, the alleged combination still would not render obvious the invention defined by the claims. This, withdrawal of this rejection is respectfully requested.

## The Alleged Combination of Ventrella and Bickmore is Inappropriate.

Paragraph 24 of the Office Action notes that one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. Applicants agree. However, Applicants note that when references are fundamentally different, such differences often argue against their combination. Such is the case here.

In particular, the differences between the two references are so numerous and significant that one of ordinary skill in the art at the time of the invention would not have been motivated to combine the teachings of Bickmore and Ventrella. Furthermore, the

proposed combination of Ventrella and Bickmore would change the principle of operation of the prior art invention being modified. Thus, Applicants respectfully submit that the teachings of the references are not sufficient to render the claims *prima facie* obvious.

First, Ventrella is directed to a player character in a three-dimensional virtual world, whereas Bickmore is directed to a flat, two-dimensional document. The avatar of Bickmore exists as attached to a flat, two-dimensional document (i.e. docked at the side of an HTML document or over an "avatar link"). There is no mistaking that Bickmore pertains to a two-dimensional avatar. Bickmore explicitly states that "in this discussion, a two-dimensional avatar is described" (¶ 40). When the avatar is resized it is scaled over two dimensions (¶ 56).

Similarly, there is no mistaking that Bickmore is directed to a document. Indeed, the whole purpose of the invention is to "provide[] a method and system for creating autonomous personal representatives, or avatars, that can be attached to an <u>electronic</u> document" (¶ 9). As the abstract states:

A method and apparatus for facilitating <u>communication about a document</u> between two users creates autonomous, animated computer characters, or avatars, which are then <u>attached to the document</u> under discussion. The avatar is created by one user, who need not be the <u>author of the document</u>, and is <u>attached to the document</u> to represent a point of view.

The Background notes problems with adding information to documents (¶ 7). All of the example embodiments described in the specification pertain to documents and/or HTML documents. Thus, Applicants submit that one of ordinary skill in the art would not look

to a method for conveying pre-recorded information in a static, flat document when trying to build an avatar to exist in, and respond to, a dynamic, three-dimensional virtual world. Even if a person having ordinary skill in the art were presented with Ventrella and Bickmore, the combination therebetween would fundamentally alter the underlying principles of operations. Thus, Applicants submit that the alleged combination is insufficient to render the claimed invention obvious.

Similarly, given the fundamentally different purposes the avatars in Ventrella and Bickmore serve, one of ordinary skill in the art at the time of the invention (and even today) would find the teachings of Ventrella and Bickmore inapposite based on the comparative levels of spontaneity and the modes of navigation. Specifically, Ventrella teaches having a player character in a virtual world react dynamically based on predefined characteristics (genes). Bickmore, on the other hand, teaches having an avatar react in response to a calculated, purposeful action. As suggested in Bickmore, a purposeful action might include a user moving a mouse over certain pre-defined text. Thus, the teachings and suggestions of Bickmore involve calculated movements by the user that are not reconcilable with the purported spontaneity of Ventrella, and, especially, with the dynamic virtual world of the claimed invention.

Moreover, Ventrella teaches navigating through a virtual world via an avatar.

Bickmore, however, teaches navigating through a document space using a separate input device. Unlike the avatar in Ventrella that visually represents user input, the avatar in Bickmore only responds to certain pre-defined events (such as a user clicking on a certain

link). Thus, the objects of the avatars in Ventrella and Bickmore are fundamentally different – the avatar of Ventrealla is the manifestation of user input that changes according to pre-defined stimuli, while the avatar of Bickmore is merely a means for conveying certain pre-defined information allegedly stored in tags in response to a pre-defined user action. Differently stated, the user in Ventrella moves through a virtual environment by using the avatar, whereas the avatar in Bickmore moves the user through a document. Thus, because the objects of the respective avatars differ so greatly, Applicant again respectfully submits that one of ordinary skill in the art would not combine the teachings of Ventrella and Bickmore without altering the underlying principles of the prior art.

Third, Applicant submits that one of ordinary skill in the art would not combine Ventrella and Bickmore because of the very examples contained in Bickmore. Again, Ventrella is directed to a three-dimensional, virtual environment. The examples in Bickmore, however, are directed to static documents created with HTML. Words, paragraphs, and the like are tagged in Bickmore, whereas cats, forests, birds, and the like are tagged in Ventrella. The environments used and objects tagged are significantly different. Applicant submits that one of ordinary skill in the art at the time of the invention would not consider techniques associated with a webpage when building a game.

The Office Action alleges that motivation to combine comes from Ventrella's suggestion "that stimuli can be prioritized using any reasonable criteria." Even if true,

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the criteria used to prioritize stimuli (which arguably are not even tags in the first place) simply does not pertain to the means used to do the prioritization. Furthermore, a recognition for a need for ordering criteria does not import a concomitant need for specific means of prioritization. Even if convenience were a sufficient motivation, there are no teachings of such needs with respect to tags (or even stimuli) in the prior art of record. The only place convenience and ease of programming appears is in Applicants' specification. But the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure.

For at least the foregoing reasons, then, Applicants respectfully submit that one of ordinary skill in the art at the time of the invention would not have been motivated to combine the teachings of Ventrella and Bickmore. Such a combination would change the underlying principles of the prior art, can only be the result of impermissible hindsight, and likely is suggested only by Applicants' own specification.

## Conclusion

For at least the above reasons, Applicants believe that the claimed invention is not obvious in view of the cited prior art. Thus, reconsideration and withdrawal of the rejection of claim 1 are respectfully requested.

Applicants also submit that amended independent claims 7 and 12 are not rendered obvious by the cited references for substantially the same reasons set forth above with respect to claim 1. Applicants respectfully submit that the remaining claims (i.e. claims

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2-6, 8-11, and 13-16) are allowable at least by virtue of their respective dependence from

allowable independent amended claims 1, 7, and 12.

In view of the foregoing remarks, Applicants believe that all of the pending claims

clearly and patentably distinguish the prior art of record and are in condition for

allowance. Thus, withdrawal of the rejection and passage of this case to issuance at an

early date are earnestly solicited.

Should the Examiner have any questions, or deem that any further issues need to

be addressed prior to allowance, the Examiner is invited to call the undersigned attorney

at the phone number below.

Respectfully submitted,

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